

Developing Augmentative Communication to Support Participation in General Education Classrooms

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“Only when Helen Keller had a means to communicate did she come to escape the pronouncement of being retarded”¹

Let's admit it. Without a means to communicate students with a label of severe disability will continue to be judged as intellectually “less than.” It is through communication that we build relationships, demonstrate learning, and engage life! For some, communication is a mix of subtle movements, eye contact, and sharing physical closeness with the significant people in their lives. For others, their communication is much more explicit. It may involve words spoken in their voice, picture symbols on a device that speaks, a switch they push that runs a computer, or photographs and text in a large binder of pages organized by topics and daily activities. An explicit means of communication is critical to that student's successful participation in the general education classroom. With an effective and efficient means of communication, a student may engage more fully in both the learning and social activities that occur in the classroom, the school, and life.

Based on our work with school teams and guiding principles from the fields of inclusive education, augmentative communication, assessment, multiple intelligence theory, and school-wide reform (see Sonnenmeier & McSheehan, 2000, and NJC, 1998), we have developed a process for enhancing communication while at the same time supporting a student to engage within the general education classroom. Moving away from traditional approaches, this process is a dynamic one. The most

salient differences in this model relate to the following points:

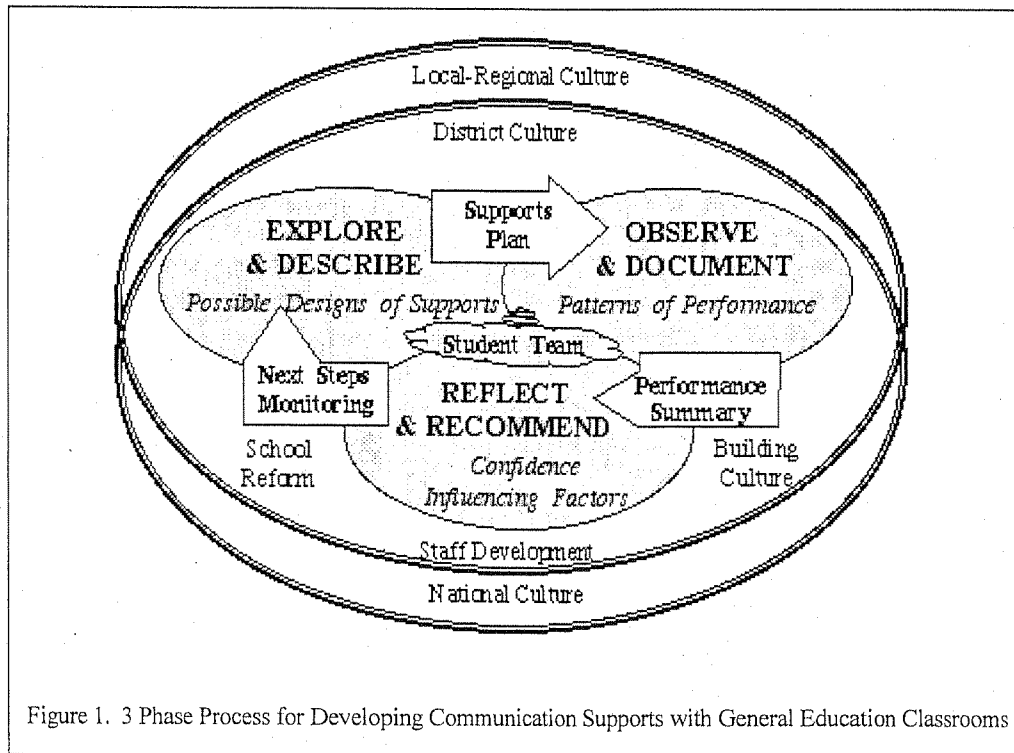
- ◆ It encourages full time attendance in the general education classroom, with or without an effective means of communication, no matter the severity of the label of disability.
- ◆ It merges general education curriculum planning and modifications with augmentative communication supports.
- ◆ It links professional development and accountability to student performance, emphasizing the attention and energy allocated to supports for inclusive education
- ◆ It conceptualizes Team collaboration in every aspect of designing, providing, and evaluating student supports.

The process is influenced by many factors, including characteristics of the stakeholders and the culture of the school community. For the purposes of discussion and ease of implementation, the development of a means of communication for a student with a label of a severe disability is grouped into a three-phase process as shown in Figure 1. (see next page)

Explore and Describe

- ◆ Body: Ways to Indicate Messages, Seating and Positioning
- ◆ Materials: Designs of Communication System and Classroom Curriculum
- ◆ People: Styles and Skills of Adults and Classmates
- ◆ Teaming: Structures and Processes for Doing the Work
- ◆ Plan: Student and Team Supports

¹ (Blatt, 1999 as cited in Taylor & Blatt, 1999, p. 79)



Observe and Document

- ◆ Accuracy: Communicating and Participating with Support
- ◆ Reliability: Predictable Performance with Support
- ◆ Summary: Pulling Data Together

Reflect and Recommend

- ◆ Confidence: Establishing What We Think Know and What We Are Experiencing
- ◆ Confirmation: Using Data to Identify Factors Influencing Performance
- ◆ Action: Specifying Next Steps

In reality, this is not a step-wise process; there is much overlap between the so-called phases. This dynamic process is embedded in the day-to-day life of the student, family, Team, classroom, and school. In our experiences it requires access to knowledge and resources, including facilitation, from outside the Team, initially. The Team decides on the degree of involvement of outside assistance and establishes milestones for reducing it as Team *confidence*, *will*, and *capacity* are strengthened.

“Considerations Along the Way”: Characteristics of the Stakeholders and Culture

The Phases of this process unfold in relationships. As with any relationship, it is a dynamic interaction with the characteristics of the players, the surroundings, and the cultural context of their play. The characteristics of the student, family, general education classroom, Team, and school comprise the dynamic relationships of this process. By understanding this from the beginning and at each Phase within the process, a Team will be better positioned for success. Such an understanding is achieved through direct observations, interviews, and review of articles of evidence (student work samples, IEP, progress reports, evaluations, grade level curriculum frameworks, school newsletters, school improvement plans, etc.).

In getting to know a student, it can be helpful to survey the Team, including the family, and classmates. Even if Team members are already acquainted with the student (obviously the family is), answering these questions allows the Team to reflect on what they think is “known” about the student. Summarizing that may clarify and expand the Team’s shared understanding of this student. Questions may include:

- ◆ Who is this student?
- ◆ What is he or she good at doing? What are his or her strengths?
- ◆ Who does this student prefer to be around? Who are his or her friends?
- ◆ What does this student like to do? What are his or her favorite activities?
- ◆ How does this student learn best?
- ◆ What makes this student happy? Sad?
- ◆ What is the one thing you like best about this student?
- ◆ What is your hope for this student's educational experience?
- ◆ What is your fear for this student's educational experience?

Taking a more ethnographic approach, "A Day in the Life Of ____" observations of the student, both at home and in school, are necessary to begin to see life through this student's eyes.

General Education Classroom:

To develop an understanding of the culture of the classroom, the teacher(s)' teaching style, the typical instructional activities and routines, and the typical interaction patterns among classmates, the team observes the student's general education classroom. These observations should be completed for every academic and non-academic activity in which students in this classroom participate over the course of a typical school day/week. The focus of these observations is on what everyone in the class is doing, saying, etc. and what is expected of the group as a whole. The focus is NOT on the student with a label of a disability, although they may inform understanding of life through this student's eyes.

Team:

A questionnaire about who the student is such as the one described above may reveal not only differences in perceptions of who this student is, but also dynamics at play from the history of members collaborating as a "Team." Following up such a questionnaire with personal interviews of all team members allows for:

- Establishing rapport with educational team members
- Learning about their style/approach
- Expanding on information gathered in the questionnaire
- Identifying common themes (e.g., priorities for student learning)
- Describing the professional culture of the school
- Describing the home to school relationship
- Describing other projects, school improvement efforts, and general demands on "time"

School:

Each school has its own culture. Listen to conversations in any faculty lounge and one can get a feel for the many forces at play from within and outside the school community. Schools also have annual improvement plans, are engaged in comprehensive school reform, and are working to address District and State level expectations for performance on standardized assessments. It is central to this proposed model that we align efforts to better support students with a label of a disability and efforts to better support all students.

PHASE I: "Develop the Plan" Explore and Describe

The initial Phase of developing augmentative communication to support the student's participation in the general education classroom involves trying out different aspects of a communication system and curriculum supports with the student and the Team. The Team will acquire information regarding the student's body, communication and curriculum materials, styles and skills of adults and classmates, and team dynamics.

In the same way someone might think about the various features of a car (e.g., automatic or standard, dashboard lights and display, location of stereo components, cruise-control, etc.) it is important to consider various features of a communication system. In the example of the car features, one might find certain features more important than others. For example, someone with arthritis of the hands might prefer automatic over standard. One author of this article has a tendency to speed on the highway. Thus, features like cruise control and the speedometer display are important features, increasing success as a driver. The other author lives at the end of a bumpy dirt road in the woods. Therefore, features like the suspension and traction are important considerations, increasing success as a driver.

This period of exploration of "features" takes place while the student is participating in the general education classroom. This allows members of the Team to describe how the different aspects of the supports are working within the actual situations in which the student needs to be communicating. The exploration is guided by asking, "How might this student participate and communicate within this classroom activity?" The design is thus driven by this desired outcome. Areas to be explored and described are below.

Ways to Indicate Messages:

"With what part of the body will the student be best able to indicate a message?" This is generally referred to as "access," and more specifically, describes a "selection

technique.” Using the car analogy there are two types of transmissions, automatic or standard, which lead to two different ways to drive a car. With communication systems, there are two general ways to select a message, either directly or indirectly.

■ **Direct methods of selection** include pointing to and touching an item, using one's finger or other body part; pointing with no contact such as by eye gazing (e.g. looking at an item) or the use of an optical pointer (e.g. shining a light on an item); or saying words aloud, using voice recognition software to select an item in a computer.

■ **Indirect methods of selection** involve using a switch to access a piece of technology. For example, the technology systematically presents items for potential selection and when the desired item appears, the student activates the switch to make the selection.

“What **seating and positioning** enhances the student's success indicating a message?” Most cars are equipped with basic controls to adjust the seating angle and position forward and backward, and to adjust the tilt of the steering wheel. Some have more refined controls for head and lumbar support, heated seats, and seat height. Most desks and chairs in schools are set for less adjustment. More refined seating and positioning of the student maximizing access to the communication and curriculum materials may be necessary. Involvement of the occupational and/or physical therapist in this exploration will be critical (See Beukelman & Mirenda, 1998; Glennen and DeCoste, 1998; and Higginbotham, et al., 1995 for more information on selection methods and seating and positioning).

Various Designs of a Communication System and Curriculum Materials:

For the communication system and curriculum lessons, a Team needs to consider a variety of features and match the features to the student's needs. The “student's needs” are more than his/her personal characteristics, including the design of classroom curriculum, and the interactions with adults and classmates. What follows is an initial list to assist Teams in identifying features to explore with the student (see Beukelman & Mirenda, 1998; Glennen and DeCoste, 1998; and Higginbotham, et al., 1995 for more information.).

What type of **symbol(s)** will the student use? All types of symbols should be considered, including the use of text. If picture or icon based symbols are used; it is recommended that text be paired with the symbols to support literacy learning. Pictures may include scanned class materials within the curriculum.

Does **color-coding** improve the student's selection of a message? Does color coding help with the overall organization of the communication system and curriculum materials? Color-coding can include using different colored backgrounds or outlines to represent different groups of pages or individual symbols. Color-coding can be a support for the student to identify the general topic or type of messages contained on a page; for example, blue for social messages, green for math related messages, and yellow for science related messages. Another approach is to use different colored symbols to indicate the type of word grammatically (e.g., yellow for pronouns and important people, green for verbs, blue for frequent activities in the day) to support the forming of sentences.

What **size** do things need to be? Consider the size of the display that the student looks at, the size of the pictures or icons, and the size of the text. The size of these different aspects of the system may vary depending on the student's familiarity with the materials and the messages. For example, for a communication board that has been used frequently, it may be possible to reduce the size of some of the items, while for new material, the size may need to be increased.

Related to size are the questions “What **number of items** should be displayed together?” and “What physical **arrangement, spacing and positioning** of the items on the display might increase student success?” These features often interact with each other, influencing student performance. Some drivers prefer the windshield wiper controls on the same handle as the turn signal. Having two levers on the steering column may be distracting or physically inaccessible. Others, struggling with refined movements while driving, may be frustrated by spraying wiper-fluid on the windshield when they meant to signal to turn. Some students need lots of space between items, which might lead to fewer items on a wider display. Other students are accurate with items closer together, which might lead to greater number of items on a smaller display. Exploring the student's selections when the items are placed to the top or bottom or to the left or right may be needed. If a student cannot accurately select items from one area of the display (e.g., things located lower and to the left), grouping items into other areas of the display and leaving the problem areas empty, for now, might enhance early success using the communication system in class. Is voice output required for giving answers in class? Does voice output improve the student's motivation and therefore, performance? For example, the voice may get the attention of the student's classmates and result in more interest in using the communication system. Explore the student's response to voice output, both synthesized and recorded speech, within classroom activities. Watch for the responses of others, including classmates.

Messages Needed in Class:

A Team cannot explore and describe how the student makes selections from the communication system and the impact of various designs of the system without identifying what messages the student needs to communicate. The content of what is said by classmates in the general education classroom should drive the content of the messages of the communication system. Observing classmates as they are engaged in activities and writing down what is said in both their casual conversations and their comments related to academic content creates a pool of messages that can be used as a beginning point in designing the messages for the communication system. Selection of the specific messages will be guided by asking the following questions:

- What messages are needed to participate within the classroom activities?
- What messages are needed to give answers and demonstrate learning?
- What messages are classmates saying socially during these classroom lessons?

Other Considerations for Curriculum Materials and Personalized Instruction:

“What will help the student interact with the classroom material and engage in the classroom learning activities?” Curriculum supports will overlap with the design of the communication system. For example, worksheets might be modified with picture symbols and text that are consistent with the way that symbols and text are used on the communication system. There needs to be consideration for learning goals of lessons, including adjustments in the amount of work that a student is expected to complete, personalized instruction, and adjustments of the grading criteria. As with the communication supports, the curriculum supports are individualized based on the student’s learning style. (For further discussion of curriculum accommodations and supports, see Jorgensen, 1998, Tashie, et al., 1993).

Interpersonal Styles and Facilitation Styles:

The ways in which adults and classmates interact with a student will also have an effect on that student’s participation within the general education classroom. Differences in the student’s performance using the communication system will be observed based on the adults’ and classmates’ skills and styles of interaction. These differences may vary depending on the role of the adults or classmates as either the conversational partner or facilitator of the interaction. Conversational partners communicate directly with the student about the topic at hand. Facilitators support the student to use the communication system, and assist to manage the interaction with other conversational partners (see Light & Binger, 1998). Certain styles and skills will emerge as most helpful to the student.

The success of specific strategies for creating opportunities and expectations for communication should be noted. These may include conveying high expectations, age appropriateness, modeling and expansion, expectant waiting, partial participation, taking turns, physical contact, and identifying an expected mode of communication (Sonnenmeier and McSheehan, 2000). Some students may be dramatically affected by aspects of the interaction that would go unnoticed by most adults, such as: pitch and tonal qualities, rate of speech, volume-loudness, physical distance, personal scent (cologne), etc.

Preferred Supports:

The process of exploring and describing the features and content of the communication system, the curriculum design, and the interpersonal and facilitation styles results in an initial list of preferred supports. This information is gathered while the student is included in the general education class. Returning to the car features analogy, the authors’ developed their ideal car design applying prior *experiences* as drivers, their *current living circumstance*, and their unique *personal differences*. They test drove cars, evaluating whether the car rode high enough for a bumpy dirt road or whether the cruise control was easily accessed. They even invited close friends to drive with them to give their opinions on potential new cars. The student needs to be engaged in the classroom for the Team to see how the various features work together. With this presence in the classroom, classmates can offer feedback to the student and other Team members regarding their perceptions of and recommendations for supports. As moments of success are identified, preferences for a set of supports becomes clear.

A written Supports Plan describes the supports and how these supports will be negotiated for classroom instruction. The “what” of the Supports Plan may be a brief document that is shared among the Team. The “how” of the Supports Plan can be more complicated to convey to members of the Team. A written document may capture the implementation plan, and the use of video clips and photographs may illustrate subtle nuances that are key to success.

Teaming Processes:

Effective and efficient Team work is required for the Phases of developing a communication system and curriculum supports. Success relies on processes that foster open communication and accountability; engaging each Team member, including the family. In Phase I it will be useful for the Team to explore and describe how they work together and to propose new ways of working together to enhance the outcomes from each Phase. The Team may compile a list of responsibilities, functions, and roles to be coordinated for this endeavor. This might lead to identifying training and professional development

needs. The Team may specify group expectations, meeting structures, and strategies for time management. This too might lead to professional development needs regarding group collaboration, effective meetings, conflict resolution, reflective practice, etc. (The nature of reflective practice and collegial teaming may not be familiar to some Teams. Interested readers are directed to the resource list.) In particular, identifying a strategy for documenting student performance and the ways in which the supports are provided is critical to evaluating efficacy of the supports and confidence in student performance. Some Teams may find it helpful so specify a "Team Plan" with the "Supports Plan." Teaming Processes established in Phase I and refined in Phase II will have tremendous impact in Phase III. These issues are addressed further in the next section.

This Supports Plan provides an initial set of guidelines for the Team to follow in building more consistency in the student's communication, participation, and learning within the curriculum, which becomes the primary focus of Phase II. It is against this set of guidelines that the Team will evaluate how well things are going.

PHASE II: "Work the Plan"

Observe and Document Implementation of the Plan

Efforts in Phase I produced a "Supports Plan" specifying preferred types of supports and ways to provide them to the student. It describes: ways the student will indicate messages, preferred seating and positioning, key design features of the communication system (e.g., symbols, physical arrangement, color coding), key design features of the curriculum modifications, messages prioritized to enhance participation in the classroom and demonstration of learning in the curriculum, preferred styles of communicating with the student, and skills for facilitating interactions between the student and other classmates or adults. The Supports Plan will also describe Team structures and processes for implementing the supports identified. These may include: Team roles and functions, meetings for activity-lesson planning and evaluation, timelines for training, and rubrics for Team competencies. The design of the Student Supports Plan, and corresponding Team Supports Plan reflects a "best guess given what the Team knows right now," and the application of "guiding principles" (see Sonnenmeier & McSheehan, 2000).

The goal in Phase II is to systematically observe and document the implementation of the Supports Plan. The themes of Phase II are increasing *accuracy* and *reliability* over time. The Team will systematically observe and document the student's *accuracy* and *reliability* using the communication system in the general education classroom. The Team will systematically observe and document the Team's *accuracy* and *reliability* providing supports for the

communication system and curricular activities in the general education classroom.

Accuracy:

The Team should see an increase in the student's ability to clearly select messages and engage the communication system to convey what s/he wants to say when s/he wants to say it. The focus is on the student's physical control of his or her body to select specific items from a display (e.g., communication board, computer screen, worksheet for a class lesson). This will help the Team examine the efficacy of aspects of the Student Supports Plan and identify additional factors (e.g., fatigue, other environmental factors) that need to be addressed. Observations about the student's skills and the factors influencing overall performance need to be documented over time.

The accuracy of the student's physical skills may vary with the style and skills of the facilitator (the person who is supporting him/her to communicate), as well as with the style and skills of the communication partner (the person with whom s/he is communicating). Observations about the different skills and interaction styles that are found to be helpful need to be documented over time.

There should also be an increase in the Team's ability to provide supports, demonstrating skills described in the Supports Plan. The focus is on the Team's ability to negotiate supports that enhance the student's accuracy during message selection. Documentation of how supports are provided will allow the Team to evaluate their skill development over time.

Reliability:

The Team should see an increase in the consistency of how the student uses the communication system. While "consistent use" may vary slightly from day to day, what the Team should be looking for is a *pattern of performance over time*. As the student feels s/he can *rely* on the supports for the communication system, how s/he uses the system and what s/he expresses for communication socially and academically should stabilize. The student's performance needs to be documented relative to the supports that are actually provided and not just those supports that were planned or anticipated. Again, a student's performance may vary with the facilitator and communication partner.

There should also be an increase in the consistency of how the Team supports the student and the communication system. While "consistent support" may vary slightly from day to day, what the Team should be looking for is a *pattern of performance over time*. As the Team feels more confident with their new skills, the way they implement the Supports Plan should stabilize. This means the supports are provided in a predictable fashion and in the

same manner, across different adults. Such consistency is essential to the student developing *reliable* use of the system. This will help the Team to examine the efficacy of aspects of the Team Supports Plan and identify additional factors (e.g., effective and efficient meetings, communication, collaboration) that need to be addressed.

When members of the Team observe each other in interactions with the student, they will be able to refine a list of skills and ways of communicating that are most helpful for the student. This includes documentation of both the style and skills of adults and classmates when they are in the role of conversational partner and when they are in the role of a facilitator of the interaction.

Using this list, Team members and classmates can monitor their growth, demonstrating accuracy and reliability with each skill or approach. By observing each other interacting with the student or by self-assessment, Team members can guide and prioritize their own learning, and need for training or coaching.

By observing and documenting their implementation of the Supports Plan, Team members will notice their confidence with new skills as they improve throughout Phase II. In Phase III acknowledging that level of confidence of individual members and the Team as a whole becomes a necessary part of reflecting on student performance. Some Team members may have a "gut feeling" about the efficacy of certain supports early on in Phase II. These are valid impressions. However, it is important to implement the supports long enough to collect student performance data which may or may not agree with "gut feelings." A Summary of Performance based on the documentation from Phase II, is a helpful product for entering Phase III. The Summary of Performance will vary from team to team. It may be a comprehensive report of all the Phase II findings, a smaller collection of results from classroom lessons and units, or a series of video clips of different adults supporting the student. What is necessary is to provide data on student and Team performance to focus reflections and recommendations in Phase III.

PHASE III:

Reflect on Data and Recommend Next Steps

Information gathered in Phase II is compiled into a "Summary of Performance," specifying outcomes from lesson planning, classroom instruction, and communication interactions with the student, classmates, and adults. It describes the student's performance relative to the supports provided, the skills of classmates relative to various interactions, and the skills of adults of providing supports.

It is the goal of Phase III to engage the Team in structured reflection and to generate recommendations for next steps based on the findings from Phase II. Reflecting provides an opportunity for Team members to specify their level of confidence in the student's use of the communication system and in their supports for the student with his/her communication system. Reflection can be guided by the use of focus questions. For example, the Team may be interested in understanding differences in the student's performance when interacting with different communication partners. The focus question will guide the Team's review of the data and may, in some cases, lead to additional data collection.

The design of forms to collect the information can be individualized by a team to help answer their focus questions. Incorporating the data collection into the typical planning and evaluation forms for curricular lessons and staff development, already in use is recommended. This will allow Team members to see the relationships among various supports, student performance, and Team competencies. In an attempt to facilitate time spent reflecting, some Teams may prefer to separate the data collection for separate questions they want to answer. What is important here is that the "Supports Plan," "Summary of Performance," and reflection on performance be data-driven. While different members of the team will have valid perspectives on how the student is performing and on how effective the supports are, tangible evidence related to the Team's questions will focus conversation on *those* questions.

Reviewing and reflecting on data gathered systematically from planning, implementing, and evaluating lesson plans is helpful. The Team need not, and should not wait for collection of all of the data addressing all of their questions prior to reviewing the information and making some initial recommendations. Ongoing reflection on the implementation, observation and documentation is encouraged.

Acknowledging the Team members' confidence in the student's use of the communication system and in the provision of the supports is essential for the next part of Phase III, generating recommendations. By naming discrepancies between what Team members were planning to do and what Team members actually felt confident doing, the validity of the recommendations increases. The Team can make recommendations to improve their own capacities to better answer questions regarding student performance. For example, Team members will be able to evaluate their confidence in the student's performance on tests and other assessments of his/her learning based on their confidence in the student's use of the communication system and their confidence in how supports were provided on any given day. If confidence regarding the way

supports were provided on a particular day is low, the Team should be less likely to attach poor student outcomes to the student's abilities but rather to the way that the supports were provided. In fact, questions regarding what the student "knows" should not be asked until a consistent and reliable means of communication is in place for the student, with all of the appropriate supports in place for its consistent use.

Generating recommendations is not the ending point in this process. It is cyclical. Recommendations will lead naturally to revisions in the questions being asked and the Supports Plan being implemented (Phase II). This cyclical process can guide not only an initial discovery period of developing a communication system (Phase I), but also the monitoring process for ongoing maintenance of a communication system (Phase III). Each time through the cycle acts to clarify and increase the level of confidence in student performance in the general education classroom. As we improve our supports we improve each student's success, coming one step closer to the vision and mission of fully including students with labels of severe disabilities.

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SELECTED FEATURE CONSIDERATIONS IN AUGMENTATIVE COMMUNICATION

Date: _____ Time: _____ Class: _____ Adult(s) involved: _____

Device Feature	Student's Role	Other	Messages
Type of System: <input type="checkbox"/> Non-electronic System (paper only) <input type="checkbox"/> Static Display Device <input type="checkbox"/> Dynamic Display Device Arrangement of Display: <input type="checkbox"/> Overall Size _____ <input type="checkbox"/> Number of Items _____ <input type="checkbox"/> Size of symbols _____ <input type="checkbox"/> Spacing or positioning of items _____ Other _____	Direct Selection Using: <input type="checkbox"/> Finger <input type="checkbox"/> Hand <input type="checkbox"/> Eyes Other _____ Accessing through: <input type="checkbox"/> Single switch <input type="checkbox"/> Multiple switch <input type="checkbox"/> Adapted Keyboard/Mouse <input type="checkbox"/> Touchwindow Other _____ Student's Position: <input type="checkbox"/> In wheelchair <input type="checkbox"/> In desk chair <input type="checkbox"/> On floor, cross legged <input type="checkbox"/> Other: _____ Other Factors: <input type="checkbox"/> Fatigue <input type="checkbox"/> Sensory processing <input type="checkbox"/> Emotional Status <input type="checkbox"/> Seizure Activity <input type="checkbox"/> Other: _____	Device Position: <input type="checkbox"/> On desk <input type="checkbox"/> On table <input type="checkbox"/> On lap <input type="checkbox"/> On floor <input type="checkbox"/> Held up at eye level Other _____ Related Influencing Factors (describe) <input type="checkbox"/> Peer Interest <input type="checkbox"/> Meaningfulness of content <input type="checkbox"/> Hands on activity <input type="checkbox"/> Lecture <input type="checkbox"/> Self-selected <input type="checkbox"/> Other-directed <input type="checkbox"/> Other contextual info: _____ Describe _____ Comments: _____	Content / Messages (describe): <input type="checkbox"/> Core Messages <input type="checkbox"/> Topic Related to Specific Academic Area <input type="checkbox"/> Topic Related to Social Interactions Describe _____ Type of Output: <input type="checkbox"/> None (listener assisted) <input type="checkbox"/> Synthesized speech output <input type="checkbox"/> Digitized (recorded) speech output <input type="checkbox"/> Capability for both synthesized and digitized speech <input type="checkbox"/> Printed output Other _____ Comments: _____

Augmentative Communication Features Exploration Worksheet

FEATURE	COMMENTS
Type of System: <ul style="list-style-type: none"> Non-electronic System 	
<ul style="list-style-type: none"> Dedicated Device (specifically for communication) 	
<ul style="list-style-type: none"> Computer Based Device (+ switch or touch screen) 	
Access/Selection Technique:(Independent or Dependent) <ul style="list-style-type: none"> Direct Selection (using finger, hand, eyes etc.) 	
<ul style="list-style-type: none"> Head controlled options (laser, optical, stick) 	
<ul style="list-style-type: none"> Switch = single switch, multiple switch 	
<ul style="list-style-type: none"> Use with an Adapted Keyboard/Mouse 	
<ul style="list-style-type: none"> Other (e.g., Keyguard, Eagle Eyes, Mind Mouse, etc.) 	
Seating / Positioning <ul style="list-style-type: none"> of student /supports 	
<ul style="list-style-type: none"> of communication device 	
Symbols: (impact of symbol type on use) <ul style="list-style-type: none"> Picture (e.g. PCS, Minsymbol, Dynasym) + Text 	
<ul style="list-style-type: none"> Text Only 	
<ul style="list-style-type: none"> Photos + Text 	
<ul style="list-style-type: none"> Video/Multimedia 	
Color coding <ul style="list-style-type: none"> background or outline of symbol/button 	
<ul style="list-style-type: none"> background or outline of section/category 	
<ul style="list-style-type: none"> background of board 	
<ul style="list-style-type: none"> other 	
Display Type <ul style="list-style-type: none"> Static Display 	
<ul style="list-style-type: none"> Dynamic Display 	
Arrangement of Display: <ul style="list-style-type: none"> Overall Size 	
<ul style="list-style-type: none"> Number of Items 	
<ul style="list-style-type: none"> Size of Items 	
<ul style="list-style-type: none"> Spacing or positioning of items 	

FEATURE	COMMENTS
Type of Output:	
• None; listener assisted	
• Synthesized speech output	
• Digitized (recorded) speech output	
• Capability for both synthesized and digitized speech	
• Printed output	
Content / Messages: (motivating, meaningful, relevant, age-appropriate)	
• Core Messages	
• Topic Related to Specific Academic Area	
• Topic Related to Social Interactions	

STUDENT CHARACTERISTICS	COMMENTS
Fatigue	
Sensory Processing	
Seizure Activity	
Emotional Status	
Other Physiological Info:	

RELATED - INFLUENCING FACTORS	COMMENTS
Peer Interest	
Meaningfulness of Content	
Nature of Activity (hands on, lecture, etc.)	
"Self Selected" or "Other Directed" Activity	
Other Contextual Info:	